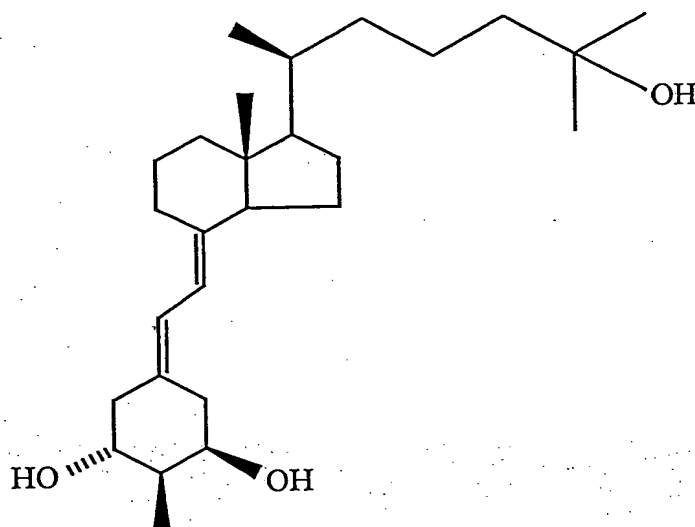


## CLAIMS

We claim:

1. A method of treating metabolic bone disease where it is desired to maintain or increase bone mass comprising administering to a patient with said disease an effective amount of  $2\alpha$ -methyl-19-nor-20(S)- $1\alpha,25$ -dihydroxyvitamin  $D_3$  having the formula:



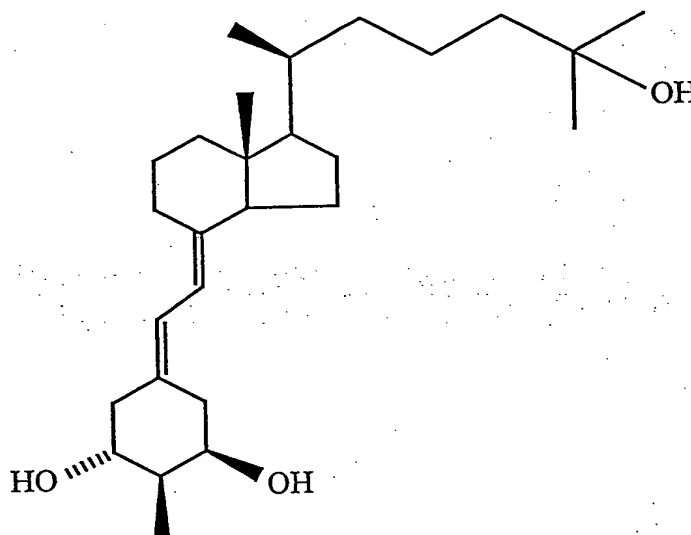
2. The method of claim 1 where the disease is senile osteoporosis.
3. The method of claim 1 where the disease is postmenopausal osteoporosis.
4. The method of claim 1 where the disease is steroid-induced osteoporosis.
5. The method of claim 1 where the disease is a low bone turnover osteoporosis.
6. The method of claim 1 where the disease is osteomalacia.
7. The method of claim 1 where the disease is renal osteodystrophy.
8. The method of claim 1 wherein  $2\alpha$ -methyl-19-nor-20(S)- $1\alpha,25$ -dihydroxyvitamin  $D_3$  is administered orally.

9. The method of claim 1 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered parenterally.

10. The method of claim 1 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered transdermally.

11. The method of claim 1 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered in a dosage of from 0.1 $\mu$ g to 10 $\mu$ g per day.

12. A method of treating psoriasis comprising administering to a patient with psoriasis an effective amount of 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> having the formula:



13. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered orally.

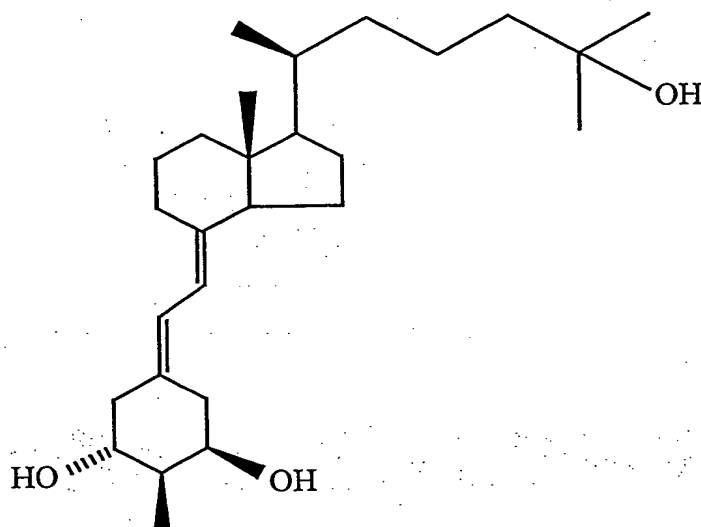
14. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered parenterally.

15. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered transdermally.

16. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered topically.

17. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered in a dosage of from about 0.01  $\mu$ g/day to about 10  $\mu$ g/day.

18. A method of treating leukemia, colon cancer, breast cancer or prostate cancer comprising administering to a patient with said disease an effective amount of 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> having the formula:



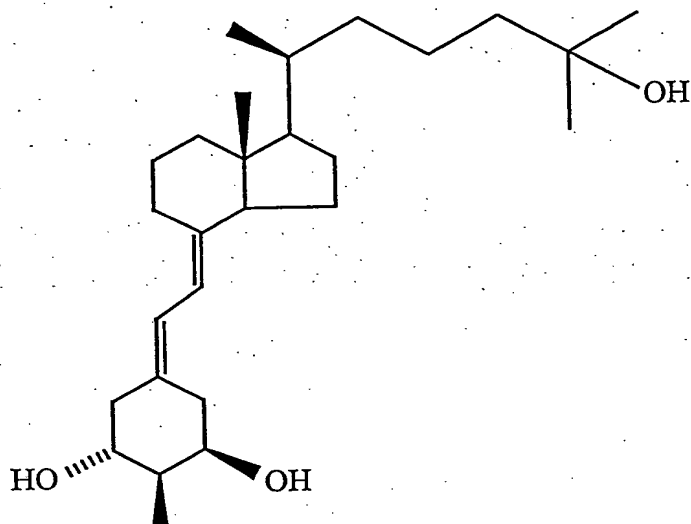
19. The method of claim 18 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered orally.

20. The method of claim 18 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered parenterally.

21. The method of claim 18 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered transdermally.

22. The method of claim 12 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered in a dosage of from about 0.01  $\mu$ g/day to about 10  $\mu$ g/day.

23. A method of increasing the strength of a bone comprising administering to a patient in need of such treatment an effective amount of 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> having the formula:



24. The method of claim 23 wherein the bone strength is cortical strength.
25. The method of claim 23 wherein the bone strength is trabecular strength.
26. The method of claim 23 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered orally.
27. The method of claim 23 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered parenterally.
28. The method of claim 23 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered transdermally.
29. The method of claim 23 wherein 2 $\alpha$ -methyl-19-nor-20(S)-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> is administered in a dosage of from 0.1 $\mu$ g to 10 $\mu$ g per day.